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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,220	01/16/2001	Keiichi Hayashi	Q62674	9946
<div>7590 SUGHRUE, MION, ZINN MACPEAK & SEAS 2100 Pennsylvania Avenue, N.W. Washington, DC 20037</div>				
EXAMINER				
PEREZ, JULIO R				
ART UNIT		PAPER NUMBER		
2617				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/759,220

Applicant(s)

HAYASHI, KEIICHI

Examiner

JULIO R. PEREZ

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-10 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-10 and 12-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-3, 5-10, 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al (US006366791B1) in view of Yoshino (US006308086B1).

Regarding claim 1, Lin et al. disclose a mobile communication terminal equipped with an Internet browser function, comprising: means for fetching melody data from a web-based server apparatus by using said browser function (col. 3, lines 9-29; col. 4, lines 1-11; Figs. 2, 4, the mobile stations comprise the capability to access the web page of the network in order to download musical scores, that is melody data, containing ringing tones); and tone setting means for setting ringing tones based on tone information contained in said melody data (col. 4, lines 1-57; col. 5, lines 1-2; col. 5, lines 16-27; Fig2. 2, 4, the ringing tones can be implemented once received and

stored within the SIM, where the ringing tones are programmed in accordance with the ringing tone patterns).

What Lin does explicitly disclose is wherein said tone setting means sets ringing tones by performing a modulation processing on a tone representative of the melody based on said tone information contained in said melody data.

Yoshino teaches a mobile communications terminal with extraction of audio signal frequencies means, which, in turn need to be converted to readable form to a transducer. Modulation occurs in Yoshiro, thus, modulation processing occurs on scale, which are tones of the musical scales. Furthermore, extracting audio signal frequencies, i.e., musical scale signals are modulated in units of corresponding frequencies, therefore, modulation occurs (col. 1, lines 54-63; col. 2, lines 46-49; col. 4, lines 32-40; col. 5, lines 21-29;).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further implement the communication terminal of Lin et al. so as to include modulation processing as per the teachings of Yoshino so that the set ringing tones in the musical scores can be executed as ringing tone patterns on the MS.

Regarding claim 2, the combination discloses the mobile communication terminal, wherein if said melody data contains no tone information, said tone setting means sets a ringing tone based on preset tone information (Lin, col. 3, lines 31-67; col. 4, lines 1-11, the download is executed based on the contents of the music or tones desired by the subscriber and approved beforehand by the subscriber; if no tone is

approved, hence, no tone would be downloaded, and indeed the same tone some tones already stored will stay active).

Regarding claim 3, the combination discloses the mobile communication terminal, wherein if said melody data contains tone information, said tone setting means judges the validity of said tone information (Lin, col. 3, lines 31-67; col. 4, lines 1-11; Fig. 2, the system may determine the type of tones to be downloaded during the decision to acquire the tones from the web server).

Regarding claims 5, 12, the combination discloses wherein said tone information contained in said melody data constitutes tone parameters used for said modulation processing (Yoshino, col. 4, lines 34-36, the extracting of frequency components from the audio signal, corresponds to ringing or tone parameters).

Regarding claims 6, 7, 13, 14, Lin does not explicitly disclose the mobile communication terminal, further comprising: ringing-speed setting means for setting a tempo at which a melody is played in accordance with said melody data.

Yoshino teaches a mobile communications terminal with periodicity controlling means to control the rhythm of a melody to be reproduced (col. 2, lines 54-55; col. 6, 16-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further implement the communication terminal of Lin et al. so as to include rhythm computational means as per the teachings of Yoshino et al. so as to have means of a timing signal for setting a tempo; that is, the relative speed at which music is played in accordance with the melody data being received.

Regarding claim 8, Lin discloses a ringing method for a mobile communication terminal equipped with an Internet browser function, comprising: having access to a web-based server equipment by means of said browser function (col. 3, lines 9-29; col. 4, lines 1-11; Fig. 2, refs. 35, 40, 45, 55; Fig. 4, the mobile stations comprise the capability to access the web page of the network in order to download musical scores, that is melody data); notifying said server equipment of desired melody data in conformity with said access (col. 3, lines 21-29; Fig. 2, the terminal may be used to request musical tones from the server via the Internet); receiving said desired melody data from said server equipment (col. 3, lines 31-46; col. 4, lines 1-11, the mobile obtains the musical tones from the server for later playing); storing said received desired melody data (col. 2, lines 22-57; col. 4, lines 12-38; Fig. 4, the terminal possesses the capability to store the melody tones within); judging whether said stored melody data contains tone information (col. 3, lines 31-67; col. 4, lines 1-11; Fig. 2, the system may determine the type of tones to be downloaded during the decision to acquire the tones from the web server); fetching said tone information if it is judged that said melody data contains the tone information (col. 3, lines 31-67; col. 4, lines 1-11; Fig. 2, 4, the system may determine the type of tones to be downloaded during the decision to acquire the tones from the web server); setting a tone for playing a melody in accordance with said melody data, based on said fetched tone information (col. 4, lines 1-57; col. 5, lines 1-2; col. 5, lines 16-27, the ringing tones can be implemented once received and stored within the SIM, where the ringing tones are programmed in accordance with the ringing tone patterns); and playing said melody in said set tone (it

is inherent as evidenced by the fact that one of ordinary skill in the art would have recognized that the tone is to be played as soon as a ringing melody is downloaded, col. 3, lines 9-46).

What Lin does explicitly disclose is wherein said tone setting means sets ringing tones by performing a modulation processing on a tone representative of the melody based on said tone information contained in said melody data.

Yoshino teaches a mobile communications terminal with extraction of audio signal frequencies means, which, in turn need to be converted to readable form to a transducer. Modulation occurs in Yoshiro, thus, modulation processing occurs on scale, which are tones of the musical scales. Furthermore, extracting audio signal frequencies, i.e., musical scale signals are modulated in units of corresponding frequencies, therefore, modulation occurs (col. 1, lines 54-63; col. 2, lines 46-49; col. 4, lines 32-40; col. 5, lines 21-29;).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further implement the communication terminal of Lin et al. so as to include modulation processing as per the teachings of Yoshino so that the set ringing tones in the musical scores can be executed as ringing tone patterns on the MS.

Regarding claim 9, the combination discloses the ringing method for a mobile communication terminal, wherein if said melody data contains no tone information, a ringing tone is set based on preset tone information (Lin, col. 3, lines 31-67; col. 4, lines 1-11, the download is executed based on the contents of the music or tones desired by

the subscriber and approved beforehand by the subscriber; if no tone is approved, hence, no tone would be downloaded, and indeed the same tone some tones already stored will stay active).

Regarding claim 10, the combination discloses the ringing method for a mobile communication terminal, wherein if said melody data contains tone information, the validity of said tone information is judged (Lin, col. 3, lines 31-67; col. 4, lines 1-11; Fig. 2, the system may determine the type of tones to be downloaded during the decision to acquire the tones from the web server).

Response to Arguments

4. Applicant's arguments filed 11/05/08 have been fully considered but they are not persuasive. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In regards to the applicant's arguments that neither Yoshino nor the combination with Lin teaches or suggests "modulation processing." In response to applicant's argument that Yoshino does not make up for the deficiency of the teaching of modulation processing as taught by Lin with respect to claims 1 and 8, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be

reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Yoshino is solely used to teach the specific computation steps of the present invention. Furthermore, Yoshino teaches extraction of audio signal frequencies means that, in turn needs to be converted to some readable form to a transducer. Hence, modulation occurs in Yoshino, which is the processing of some data, that is, "modulation processing" occurs on scale, which are tones of the musical scales. Thus, modulating a scale necessarily involves modulating at least some of the tones in the scale.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JULIO R. PEREZ whose telephone number is (571)272-7846. The examiner can normally be reached on 10:30 - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Eisen can be reached on (571) 272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. R. P./
Examiner, Art Unit 2617

1/12/09

/Alexander Eisen/
Supervisory Patent Examiner, Art Unit 2617
12-Jan-09